

SEAA 1439 Update as of October 24, 2012

To R. Bruce Brown, Lower Beaver Direct flow users.:

I would like to update you on the Division of Water Rights progress regarding Electronic - telemetry Measurement and the subject SEAA requirements via email.

Please relay this communication to the other Beaver Direct Flow users. I do appreciate you being a focal point for communication in this matter and hope that all the Direct flow users continue to work together in this regard.

This effort enables progress toward a solution of better measurement on the Beaver River.

In review, the Greenville bridge measurement site enables an equitable distribution of water between two main diversions in this reach of the Beaver river, those being the Barton and Abadare canals along with other downstream water users.

There is stream alteration permit that was submitted and approved on 10/01/2012 by the division under 12-77-0002 and is current for 2 years till 2014

The division appreciates the efforts made by the installation of the "temporary" weir structure just below or downstream of the Greenville bridge.

The Weir structure has a 6' contracted rectangular weir with an adjacent staff gauge, next to the weir opening.

In summary, the structure installed, involves metal panel sections wrapped with tarps and placed in front of fencing "T" posts.

There was some visible leakage on both the north and south sides of the weir structure, causing some concern about the relative accuracy of the structure.

Per our conversation I understand this was installed by hand and a temporary fix to address the SEAA 1429 and it is understood that it may not be sustainable under high flows.

The division installed a Telemetry Site and staff gauge on the upstream-north side of the bridge on October 15-16, 2012. This site utilizes an Radar Style "downlooker" for Vertical Measurement of water over the installed weir structure. The sensor is referenced to the adjacent staff gauge on the upstream bridge wing wall.

Although the telemetry site is installed, we are hesitant to make the Cellular modem active until a more sustainable weir structure can be established. The Radar needs to be calibrated against an accurate measurement structure to develop a rating curve.

This communication provides tentative approval of the weir structure "in concept" however the Division requires a more permanent and sustainable measurement structure be established at the same or nearby location in the near future. Once this is established the Telemetry station will be made "active" and calibrated to a rating curve.

Be advised the Radar can be relocated to the downstream wing wall (if needed) to measure changes in critical depth over the weir, {should that be necessary. Reloaction of the Radar will be determined once the permanent structure is installed and operational.

Please coordinate your efforts with our office and for requisite approvals before any major work is undertaken and keep the Division advised of progress in this matter. Sent by Mike Silva

Distribution Engineer.